

5

Science Standard
5.3.b.



Changing States: Water, Natural Systems, and Human Communities

California Education and the Environment Initiative

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California Environmental Protection Agency
California Natural Resources Agency
California State Board of Education
California Department of Education
Department of Resources Recycling and Recovery (CalRecycle)

Key Partners:

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Office of Education and the Environment

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Lesson 1 **Evaporation, the Water Cycle, and Human Communities**

- 1** Water Cycle 2
- 2** Getting Salt From the Water 3

Lesson 2 **Factors Affecting the Evaporation Rate**

None required for this lesson.

Lesson 3 **How the Water Cycle Affects Natural Systems**

- 3** Open and Closed Stomata 4
- 4** Transpiration 5
- 5** Amazon Rainforest 6

Lesson 4 **The Cooling Effects of Evaporation**

- 6** States of Water 7
- 7** Roof Garden 8

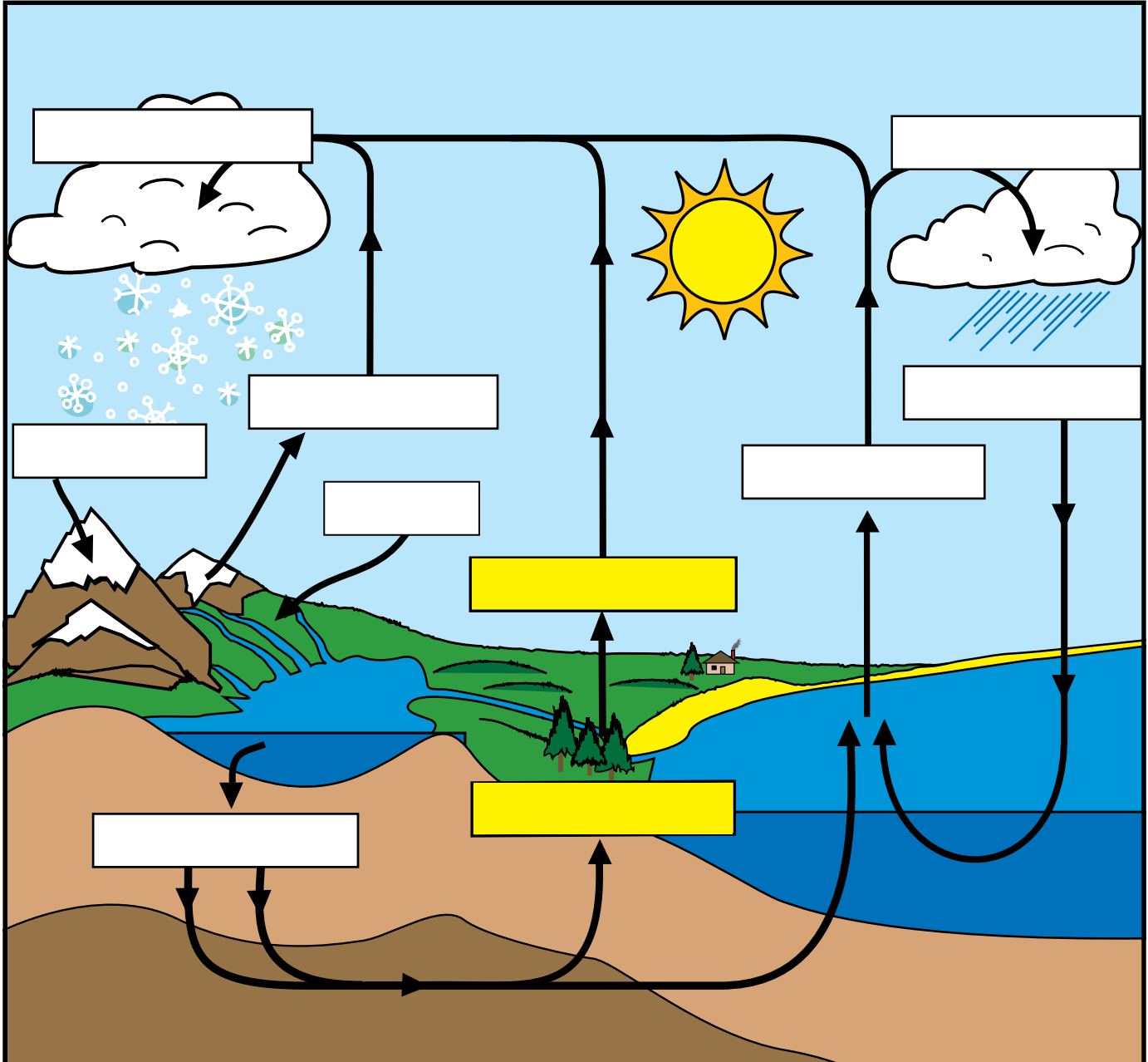
Lesson 5 **The Role of Condensation in Natural Systems**

- 8** Dew 9

Lesson 6 **Freezing in Natural Systems and Human Communities**

- 9** Frost 10
- 10** Climate Zones of California 11
- 11** Plants After a Freeze 12
- 12** Sierra Nevada Snowpack 13

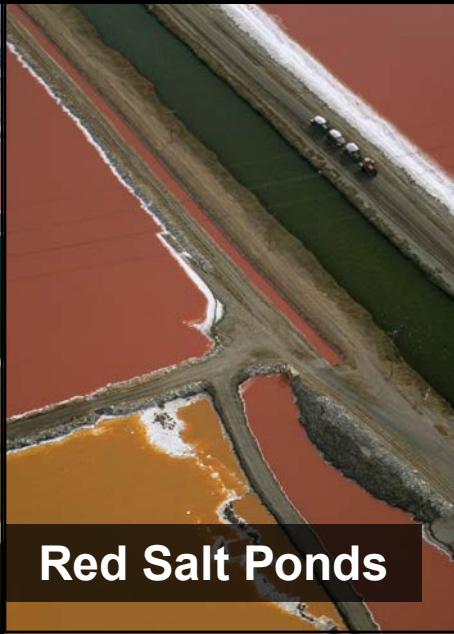
VA #1 Water Cycle



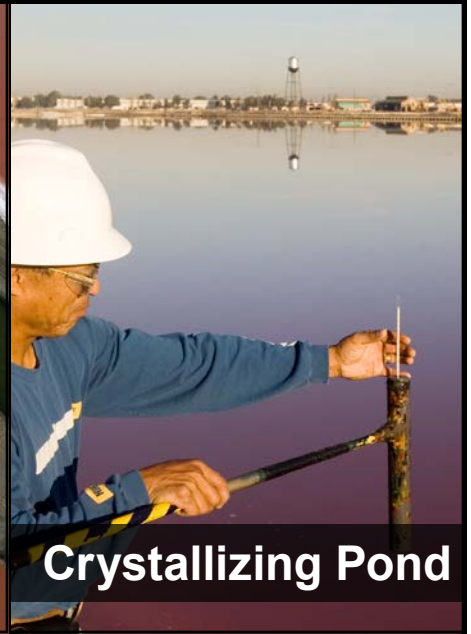
VA #2 Getting Salt From the Water



Salt Ponds



Red Salt Ponds



Crystallizing Pond



Harvesting Salt

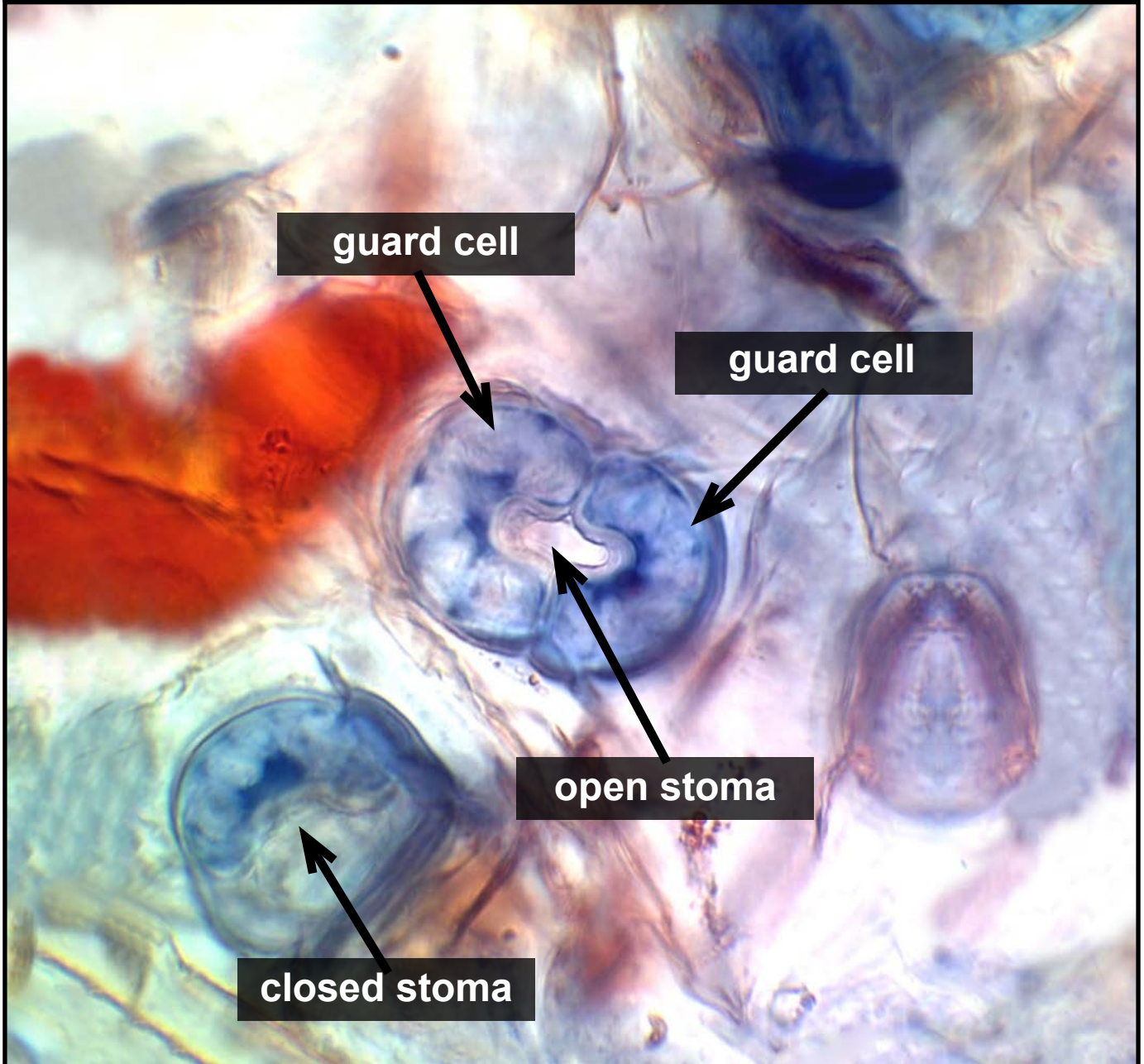


Preparing Salt

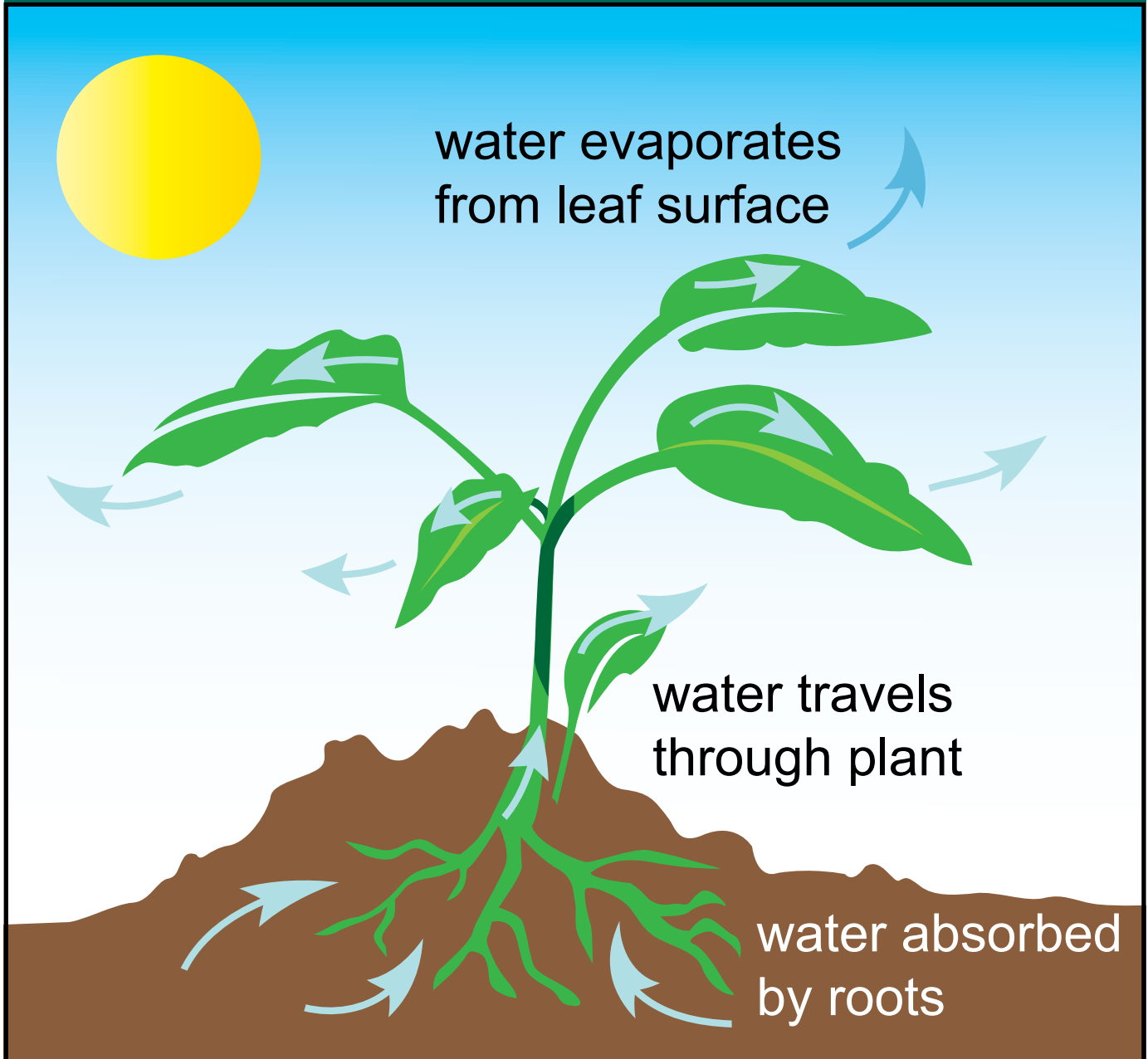


Packaged Salt

VA #3 Open and Closed Stomata



VA #4 Transpiration



VA #5 Amazon Rainforest

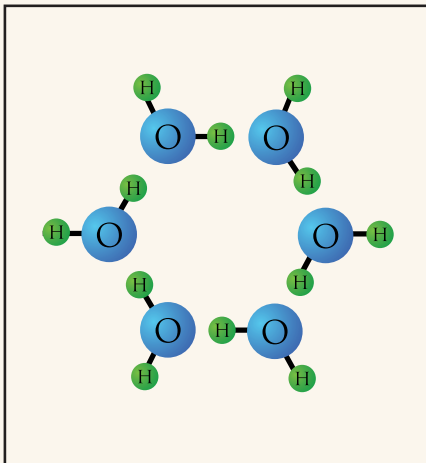


VA #6 States of Water

Taking heat from the surroundings

Solid (ice) becomes liquid water

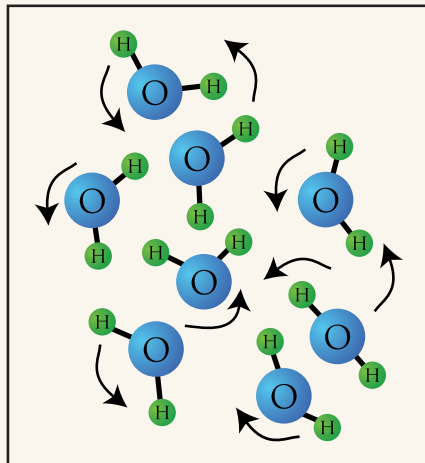
ice



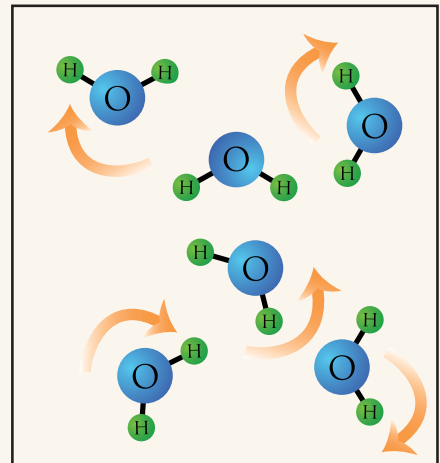
Taking heat from the surroundings

Liquid water becomes water vapor

water



water vapor



Liquid water becomes solid (ice)

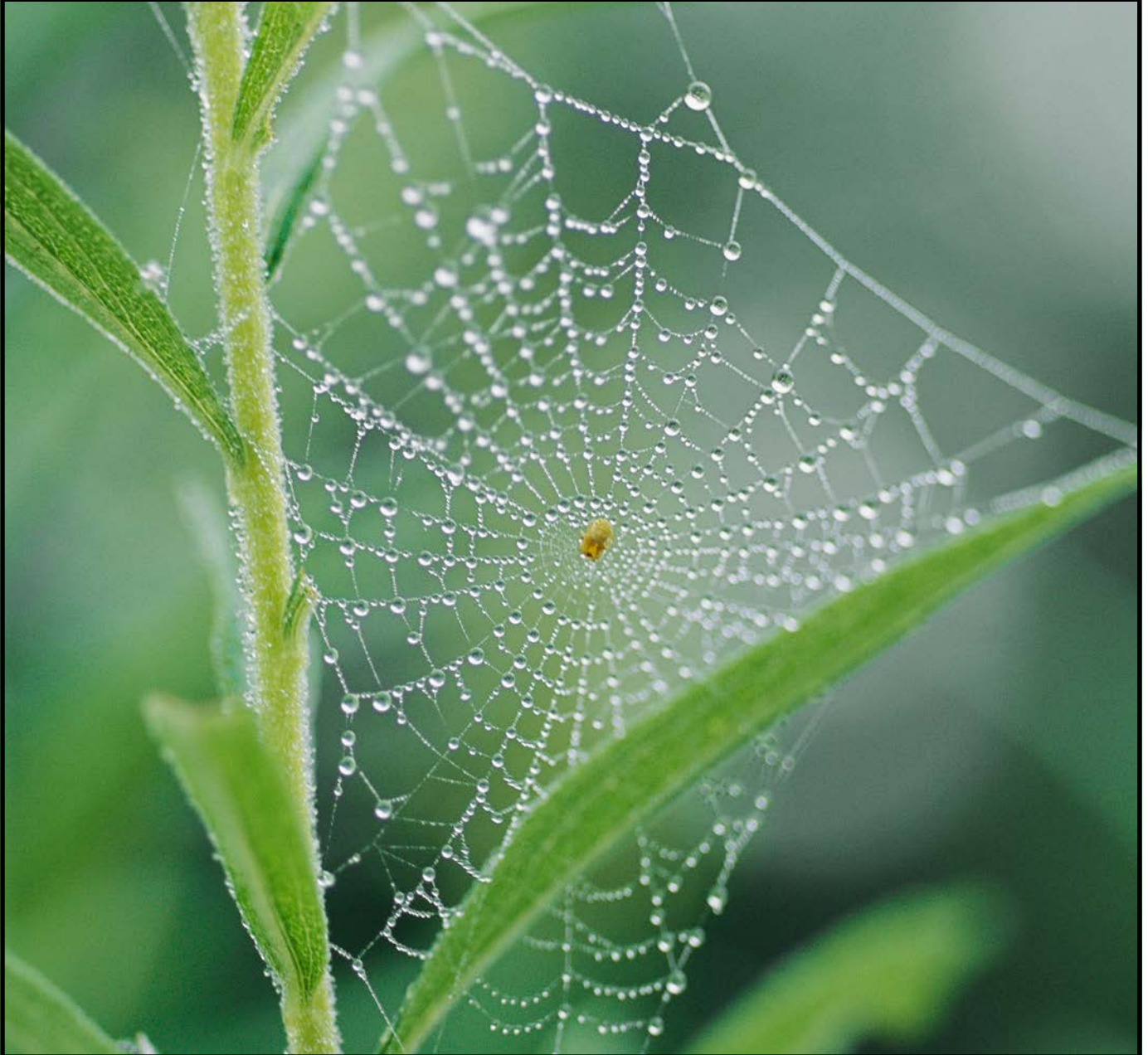
Giving off heat to the surroundings

Water vapor becomes liquid water

Giving off heat to the surroundings

VA #7 Roof Garden

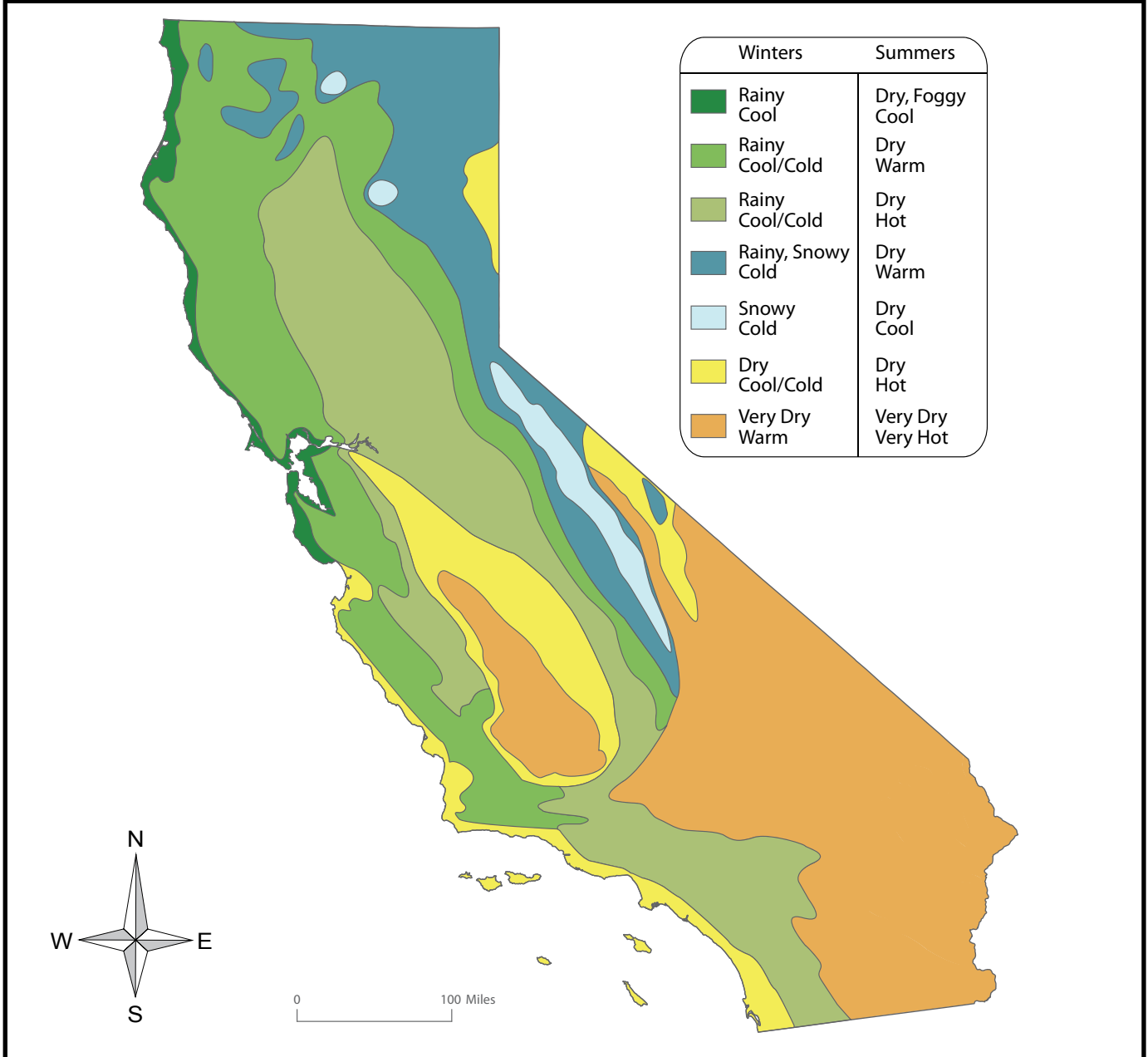


VA #8 Dew

VA #9 Frost



VA #10 Climate Zones of California



VA #11 Plants After a Freeze



VA #12 Sierra Nevada Snowpack





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